

# **INDEPENDENT REVIEWERS OF TEXAS, INC.**

4100 West El Dorado Pkwy · Suite 100 – 373 · McKinney, Texas 75070

Office 469-218-1010 · Toll Free 1-877-861-1442 · Fax 469-218-1030

e-mail: independentreviewers@hotmail.com

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## Notice of Independent Review Decision

**DATE OF REVIEW:** 12/07/09

**IRO CASE NO.:**

**DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE:**

Item in dispute: L4-S1 micro discectomy/poss arthrodesis/exploration/hardware removal 2 day LOS

**A DESCRIPTION OF THE QUALIFICATIONS FOR EACH PHYSICIAN OR OTHER HEALTH CARE PROVIDER WHO REVIEWED THE DECISION**

Texas Board Certified Orthopedic Spine Surgeon  
Practicing Neurosurgeon

**REVIEW OUTCOME**

Upon independent review, the reviewer finds that the previous adverse determination/adverse determination should be:

Denial Upheld

**INFORMATION PROVIDED TO THE IRO FOR REVIEW**

1. MRI lumbar spine 07/17/07.
2. Initial consultation report Dr. 08/24/07.
3. NCS 09/05/07.
4. Office visit notes Dr. 09/14/07, 10/18/07, 10/23/07, 11/09/07, 11/29/07, 12/18/07, 01/16/08, 05/05/08, 05/13/08, 06/10/08, 07/17/08, 10/07/08, 12/09/08, 02/06/09, 04/29/09.
5. Lumbar discogram 11/29/07.
6. Admission nursing assessment 04/26/08 and nursing notes 04/27/08-04/30/08.
7. Operative report 04/26/08 ALIF L4-5 and L5-S1 with posterior pedicle screw stabilization.
8. Lab summary reports.

9. Radiology report 04/28/08 2 views lumbar spine.
10. Office visit Dr. 09/01/09, 10/13/09.
11. CT lumbar spine without contrast 10/06/09.
12. UR determination 10/29/09 Dr..
13. UR determination 11/04/09 Dr..
14. **Official Disability Guidelines**

#### **PATIENT CLINICAL HISTORY (SUMMARY):**

The employee is a female whose date of injury is xx/xx/xx. Records indicate employee was when she bent over and felt a sudden sharp discomfort in her low back.

Initial evaluation on 08/24/07 reported the employee to state that 90 percent of her pain is axial pain, 10 percent lower extremity pain. MRI lumbar spine dated 07/17/07 reported right paramedian/posterolateral disc herniation at L5-S1 measuring about 4.8 mm in AP diameter with no significant mass effect on the thecal sac or adjacent root sleeves. Flexion extension films were noted to reveal anterior translation of L4 and L5 with flexion of approximately 5 mm. Flexion also results in anterior translation of L5 on S1 of approximately 7 mm. This completely corrects with extension lumbar spine. Provocative discogram was reported as positive at L5-S1 as well as L4-L5 abnormal disc pathology reported.

After failing a course of conservative treatment including physical therapy, medications, and epidural steroid injections, the employee underwent anterior lumbar interbody fusion L4-L5 and L5-S1 with posterior pedicle screw fixation on 04/26/08. The employee was noted to have done well postoperatively, but presented on 02/06/09 with complaints of left iliac crest bone graft harvest site discomfort. The employee was administered a corticosteroid injection which the employee verbalized complete alleviation of discomfort.

The employee subsequently was seen by Dr. on 09/01/09 with continued complaints of back pain and bilateral leg pain, left worse than right. Dr. reported that the employee did not get significant relief from previous surgery according to the employee. X-rays lumbar spine including flexion extension views revealed postoperative changes with interbody fusion at both L4-L5 and L5-S1 in good appearance. Anterior instrumentation and segmental fixation at L5-S1 was noted. Dr. reported that there was obvious anterior screw penetration of S1 bilaterally, in all likelihood irritating the sympathetic chain. Physical examination revealed a well-healed midline incision, mild paravertebral muscle spasm, no extensor lag, no sciatic notch tenderness. There was negative Fort and finger test, positive flip test bilaterally. Lasegue's was positive at about 45 degrees and there was positive Braggard's. Knee and ankle jerks were equal and symmetrical, absent posterior tibial tendon jerks. There were no gross motor deficits and there were paresthesias in a non dermatomal pattern in both lower extremities. Assessment was failed lumbar spine syndrome with bladder dysfunction and malplaced hardware with sympathetic nerve root symptoms secondary to anterior screw penetration.

The employee was referred for CT scan which was performed on 10/06/09 and reported postoperative changes in the lower lumbar spine. There was no gross hardware

disruption demonstrated. Bone grafts were in satisfactory position without evidence of retropulsion. There was no lucency surrounding the bone grafts to suggest nonunion. There was no evidence for disc herniation or neural foraminal stenosis at any level. A report dated 10/12/09 by Dr. indicates his review of the CT scan revealed anterior pedicle screw penetration at S1 bilaterally penetrating the anterior cortex at the level of the sympathetic chain.

A request for L4-S1 microdiscectomy/possible arthrodesis/exploration/hardware removal with 2 day inpatient stay was reviewed on 10/29/09 by Dr.. Dr. noted that there were inconsistencies within the medical records on 02/06/09 where an injection was noted to provide relief at the bone graft site. Bone grafts were noted to appear to be consolidating with screws well maintained with no signs of shifting. On 09/01/09, there was mention of a radiograph demonstrating screw perforation and CT scan on 10/06/09 which does not reference this screw, only postsurgical changes.

A reconsideration/appeal request for L4-S1 microdiscectomy/possible arthrodesis/exploration/hardware removal with a 2 day LOS was reviewed on 11/04/09 by Dr.. Dr. determined the request was non-certified as medically necessary. Dr. noted that CT scan did not indicate any pathology with the hardware malplacement of hardware. The employee was noted to have no evidence of pseudoarthrosis and no evidence of compressive pathology. Dr. noted the employee appears to have subjective complaints greater than objective findings. Dr. indicated that independent second surgical opinion as well as psychological evaluation would be appropriate given the employee has no substantial findings on CT scan.

**ANALYSIS AND EXPLANATION OF THE DECISION INCLUDE CLINICAL BASIS, FINDINGS, AND CONCLUSIONS USED TO SUPPORT THE DECISION.**

Medical necessity for the proposed surgical procedure is not supported by the clinical data presented for review. The employee was noted to be status post two level anterior lumbar interbody fusion at L4-L5 and L5-S1 with posterior pedicle screw stabilization. The employee initially did well following surgery according to progress reports from Dr.. The employee subsequently was seen by Dr. with complaints of ongoing low back pain and left greater than right lower extremity pain. Dr. indicated there was evidence of anterior screw penetration and malplaced hardware on x-rays and referred the employee for CT scan. The radiology report of CT scan of the lumbar spine without contrast revealed no evidence of hardware disruption, with bone grafts and satisfactory position and no evidence for retropulsion. According to the report, there was no evidence surrounding the bone grafts to suggest nonunion. There was no evidence for disc herniation or neural foraminal stenosis at any level.

Given the current clinical data and based on the ***Official Disability Guidelines***, it appears that the previous physician advisors appropriately determined that the request for hardware removal with exploration of fusion and L4-S1 microdiscectomy with possible arthrodesis was not medically necessary and reasonable.

## **A DESCRIPTION AND THE SOURCE OF THE SCREENING CRITERIA OR OTHER CLINICAL BASIS USED TO MAKE THE DECISION**

1. **Official Disability Guidelines**, Work Loss Data Institute, Online Edition, Low back Chapter.

Fusion (spinal)

Patient Selection Criteria for Lumbar Spinal Fusion:

For chronic low back problems, fusion should not be considered within the first 6 months of symptoms, except for fracture, dislocation or progressive neurologic loss. Indications for spinal fusion may include: (1) Neural Arch Defect - Spondylolytic spondylolisthesis, congenital neural arch hypoplasia. (2) Segmental Instability (objectively demonstrable) - Excessive motion, as in degenerative spondylolisthesis, surgically induced segmental instability and mechanical intervertebral collapse of the motion segment and advanced degenerative changes after surgical discectomy. [For excessive motion criteria, see AMA Guides, 5th Edition, page 384 (relative angular motion greater than 20 degrees). ([Andersson, 2000](#)) ([Luers, 2007](#))] (3) Primary Mechanical Back Pain (i.e., pain aggravated by physical activity)/Functional Spinal Unit Failure/Instability, including one or two level segmental failure with progressive degenerative changes, loss of height, disc loading capability. In cases of workers' compensation, patient outcomes related to fusion may have other confounding variables that may affect overall success of the procedure, which should be considered. There is a lack of support for fusion for mechanical low back pain for subjects with failure to participate effectively in active rehab pre-op, total disability over 6 months, active psych diagnosis, and narcotic dependence. [For spinal instability criteria, see AMA Guides, 5th Edition, page 379 (lumbar inter-segmental movement of more than 4.5 mm). ([Andersson, 2000](#))] (4) Revision Surgery for failed previous operation(s) if significant functional gains are anticipated. Revision surgery for purposes of pain relief must be approached with extreme caution due to the less than 50% success rate reported in medical literature. (5) Infection, Tumor, or Deformity of the lumbosacral spine that cause intractable pain, neurological deficit and/or functional disability. (6) After failure of two discectomies on the same disc, fusion may be an option at the time of the third discectomy, which should also meet the ODG criteria. (See [ODG Indications for Surgery -- Discectomy.](#))

Pre-Operative Surgical Indications Recommended: Pre-operative clinical surgical indications for spinal fusion should include all of the following: (1) All pain generators are identified and treated; & (2) All physical medicine and manual therapy interventions are completed; & (3) X-rays demonstrating spinal instability and/or myelogram, CT-myelogram, or discography (see [discography criteria](#)) & MRI demonstrating disc pathology; & (4) Spine pathology limited to two levels; & (5) [Psychosocial screen](#) with confounding issues addressed. (6) For any potential fusion surgery, it is recommended that the injured worker refrain from smoking for at least six weeks prior to surgery and during the period of fusion healing. ([Colorado, 2001](#)) ([BlueCross BlueShield, 2002](#))

Matthew L. Busam, MD, Robert J. Esther, MD, MSc and William T. Obrebsky, MD, MPH Hardware Removal: Indications and Expectations, J Am Acad Orthop Surg, Vol 14, No 2, February 2006, 113-120. © 2006 [the American Academy of Orthopaedic Surgeons](#)--"Although hardware removal is commonly done, it should not be considered a routine procedure. The decision to remove hardware has

significant economic implications, including the costs of the procedure as well as possible work time lost for postoperative recovery. The clinical indications for implant removal are not well established. There are few definitive data to guide whether implant removal is appropriate. Implant removal may be challenging and lead to complications, such as neurovascular injury, refracture, or recurrence of deformity. When implants are removed for pain relief alone, the results are unpredictable and depend on both the implant type and its anatomic location. Current literature does not support the routine removal of implants to protect against allergy, carcinogenesis, or metal detection. Surgeons and patients should be aware of appropriate indications and have realistic expectations of the risks and benefits of implant removal.”